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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,028	01/20/2004	Hisashi Yamamoto	7814/93	3933
757	7590	02/25/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			DENTZ, BERNARD I	
			ART UNIT	PAPER NUMBER
			1625	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/762,028

Applicant(s)

YAMAMOTO ET AL.

Examiner

Bernard Dentz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 7, 10, 39 and 40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 9, 11-38 and 41-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6, 8, 9, 11-38 and 41-50, drawn to a catalytic asymmetric epoxidation of alkenes and cycloalkenes using catalytic amounts of chiral bis- hydroxamates and a metal in the presence of an oxidation reagent , classified in class 549, subclass 529, e.g..
- II. Claims 1-7, 9,10, 12-27, 29, 33, 37, 38, 41 and 45-50, drawn to a catalytic asymmetric oxidation of sulfides of phosphines using catalytic amounts of chiral bis-hydroxamates and a metal in the presence of an oxidation reagent, classified in class 568, subclass 27 e.g..
- III. Claims 39 and 40 , drawn to a method of making bis-hydroxamic acids, classified in class 562, subclass 621.

The inventions are distinct, each from the other because: The methods of oxidation produce different types of products and would not necessarily use the the same type of oxidation reagent. The method of making the bis-hydroxamic acids is completely distinct from the oxidation methods.

Thus because of the above and the different classification indicating a separate status in the art restriction is proper.

During a telephone conversation with Ms. Mrksich on 2-15-2005 a provisional election was made without traverse to prosecute the invention of Gp. I, claims 1-6, 8, 9,11-38 and 41-50. Affirmation of this election must be made by applicant in replying to this Office action. Claims 7, 10, 39 and 40 and the non-elected parts of claims 1-6, 9,

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12-27,29, 3337,38 and 45-50 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8,9, 11-38 and 41-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoshino et al. It discloses that the instant asymmetric epoxidation reaction is catalyzed by vanadium compounds in the presence of chiral hydroxamic acids. The reference discloses that certain alpha-amino-based hydroxamic acids give stereoselectivity in this reaction. Thus it would be expected that chiral bis-hydroxamic acids which are after all hydroxamic acids would do the same.

Claims 1-6, 8,9 11-38 and 41-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michaelson et al. It is the classic article in the field of use of chiral hydroxamic acids as ligands in the vanadium catalyzed asymmetric epoxidation of allylic alcohols by hydroperoxides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Dentz whose telephone number is 571-272-0683. The examiner can normally be reached on Mon-Fri from 8:30 to 4:30.

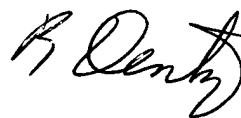
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dentz

2-16-2005



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